

RESEARCH INSTITUTE FOR MICROBIAL DISEASES
OSAKA UNIVERSITY
OSAKA, JAPAN

June 10, 1952

Dr. J. Lederberg, Professor
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College of Agriculture
University of Wisconsin
Madison, Wisconsin
U. S. A.

Dear Professor Lederberg :

I am very glad to write you this letter after a long silence. Before anything, I must acknowledge your kindness letting me know about your recent publication titled with ' Microbial Genetics', which I purchased through some book seller. Nowadays I am enjoying to read your useful and attractive book. Our friends and associates have already purchased your book following to my recommendation.

Under a separate cover, I am sending my preliminary report and a note of the studies on the antigenic variation in Trypanosoma gambiense. Moreover, our manuscript on Trichomonas vaginalis has been enclosed therewith, which is to be published in the Journal of Infectious Disease. If it is not too troublesome, I should like to ask for your bitter criticism towards our experimental data.

On the chinetosome of our strain of Trypanosoma gambiense, I examined very precisely by means of several staining methods, but I am very sorry that it was non-chinetosome strain.

In my previous letter, I wrote you that I had been working and felt keen interest in the genetical sphere of protozoology. However, I felt actually that it necessitates more knowledge of general genetics to discuss on gen control of our antigenic variation. Consequently, I have recently had earnest desire to study on the general genetics. Here I must write you that I had studied in our Department of Bacteriology for as long as about 10 years since my graduation from the Medical School, Our Osaka University. At that time, A chief of our Department of Bacteriology was Prof. Dr. Tenji Taniguchi, who is famous for his excellent works of Wasserman antigen and several virus including Japanese Encephalitis, Herpes simplex, measles, etc. During my study life in bacteriology, I worked chiefly in the field of virulology (virus-) and published about 15 papers on several species of virus, including Japanese and St. Louis Encephalitis, measles, trachoma, vaccinia, dengue fever, etc. Above all, it is to be noted that our success of animal transmissions of dengue virus was reported prior to Dr. Sabin's successful report in your country. Our preliminary paper was published in Japanese in 1943. During this war, however, I was obliged to work in the field of malariology. My chief thema at that time were to find and establish the

ideal chemotherapeutic and chemoprophylactic procedures. Then I set out the studies under consideration of exoerythrocytic life cycles. Fortunately, I established ~~some~~ interesting works also in this field. Above all, a new monkey malaria parasite was isolated from Formosan monkey by ourselves and determined as a new subspecies of *Plasmodium inui*. This species is very convenient and useful for studies of experimental malaria and very interesting taxonomically. However, I am very sorry that all strains of both avian and simian malaria had already been lost during the war. On this account, I ~~must~~ ^{had to} abstain from the malariology for a while, although there remained many interesting problems to be solved in the future.

This malaria research led me ^{to the field of} protozoology after the termination of the war. Further my studies on *Trypanosoma gambiense* make a motive to launch a new genetical studies in microbiology. On this account, I ~~am~~ ^{become to be} very much interested in both bacterial and viral genetics and able to read your papers with great interest ^{and} with easiness. Only my earnest hope is to have more knowledge of genetics. Accordingly, I have recently came to the conclusion that our studies should cover all microbial organisms. If not so, we shall not be able to understand ~~only~~ ^{even} a phenomenon in protozoa in correct way.

At present, I have an idea to establish a new Department of Microbial Genetics in our Institute in the future. Recently, I was very much interested in discussions on the origine of (antibiotics) drug resistant strain. As I am a bacteriologist in nature, I should like to work in the field of drug resistance, too.

This is my career of ^{my} scientific researches.

Allow me to ask you for your thoughtfulness giving me an opportunity to study on microbial genetics in your laboratory for a while. Of course, I shall be very lucky if you would kindly give me a freedom to work on protozoan genetics. However, I may work in the field of bacterial genetics, as I have an idea that our studies must not confined to the small part of microbiology (to protozoology). Furthermore, I am very interested in virus genetics, because I have much experience in this scientific field.

My and our papers on experimental malaria and dengue fever are sending you by sea mail under another separate cover, however I am very sorry that the major part of our studies have not yet been published in English.

Until the present, several members of our University have been in your country and working actively in the field of medical science. For example, Dr. Toru Miyaji, Assistant Professor of the Pathological Department of our Medical School, one of our intimate class mate at the school, has presently been in the Ben May Cancer Laboratory, University of Chicago, to where he removed from Bethesda after graduation from the fellowship of the National Cancer Institute, N. I. H., last year. Dr. Ryojun Kinoshita, Professor of Pathological Department of our Medical School, has ^{also} been in the University of California at Los Angeles (U. C. L. A.). As you probably

know, he is very famous for his excellent works^{accomplished} on butter yellow, ^a carcinogenic substance. Already the studies on this butter yellow have been passed by biochemists in your enzyme hotel, I heard. Recently, I hear^{too} that he gained the professorship of the University of California at Los Angeles and a post of the chief of some cancer laboratory. They have very close relationship with me and very much acquaintance with my character and career. As you know, Dr. Hayaishi is also one of our members. More recently Dr. Takeda was granted a fellowship of the California University at San Francisco, who has been studying on the enzyme adaptations in bacteria under Dr. M. Suda, who is famous for his work on successive adaptation in our Institute. Furthermore, Dr. A. Shibatani working in the histochemical studies of nucleic acid may ~~be~~ go to Dr. Mirsky, Rockefeller Institute for Medical Research, New York, in the near future.

In some journal, I have read that the international Meeting of Genetists will be held in Italy in the next year. If I were granted for my reporting our studies on Trypanosoma and Trichomonas, I should like to present at the International Meeting. Of course, I think that our experimental results are very interesting and important in the field of microbial genetics. Please ^{would you} give me your free discussion on our experimental data? If you were interested in our experimental data, I should like to ask your management for recommendation of our studies to Dr. Claudio Barigozzi, Milano, Italy. By the way, I wrote here that Dr. Sonneborn is greatly interested in our studies.

Trusting your kindness to write soon a reply, I am,

Very truthfully yours,

Shozo Inoki

Shozo Inoki, M.D.
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Assistant Professor

P.S. Would you kindly give me your opinion on our conception of the "metallages" and "Metallagite"?